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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/046,823	01/17/2002	William J. Colucci	7391/72568	5347

22242 7590 08/26/2003

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CHICAGO, IL 60603-3406

EXAMINER

TOOMER, CEPHIA D

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/046,823	COLUCCI ET AL.	
	Examiner	Art Unit	
	Cephia D. Toomer	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-~~10~~²³ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Malfer (5,697,988) in view of Cross (US 2,536,976).

Malfer teaches a hydrocarbon fuel composition which provides reduced engine deposits comprising a polyalkenyl-Mannich base detergent and a polyoxyalkylene compound (see abstract; col. 2, lines 40-47; col. 8, lines 10-16). The polyoxyalkylene compound has the following formula: $R_1-(R_2-O)_n-R_3$ wherein R_1 and R_3 are hydrogen, or alkylaryl of 1-200 carbon atoms, R_2 is an alkylene group having 2-10 carbon atoms and n is 1-500. The molecular weight of the compound is from about 200 to about 5000 (see col. 5, lines 20-50). The fuel composition also contains conventional additives such as antioxidants and demulsifiers (see col. 6, lines 38-67).

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Malfer teaches the limitations of the claims other than the nature of the alkylaryl group. However, Cross clarifies this difference.

Cross teaches alkyl aryl glycol ethers of the formula $\text{Ar-O}-(\text{CHR-CHR-O})_n\text{-H}$ wherein n is 1-20, Ar is mono- or bicyclic that may be substituted with a hydrocarbon radical and R is H or lower alkyl (see col. 1, lines 1-10). The ethers are prepared by treating an aryl glycol ether with an alkylating agent such as an olefin. Cross also teaches that "suitable olefins of high molecular weight formed by polymerization of olefins of low molecular weight" may be used to alkylate the aryl ether. Cross teaches that it is also possible to di-alkylate the aryl ethers (see col. 2, lines 6-37; col. 3, lines 44-62). The aryl radical may be phenol, cresol, etc. (see col. 3, lines 11-31).

It would have been obvious to one of ordinary skill in the art to have selected the butylenes disclosed in Cross as the starting olefin for polymerization because Cross states that low molecular weight olefins such as butylenes may be used to obtain the high molecular weight alkylate. With respect, to the molecular weight of the alkylate Cross suggests the claimed molecular weight disclosed in Malfer because Cross teaches olefins that contain up to 18 carbon atoms (molecular weight of approximately 215) and since he states that the alkylate polymer possesses a high molecular weight it stands to reason that the molecular weight would be greater than 200.

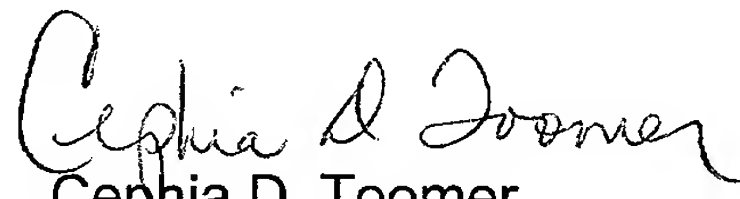
4. The prior art made of record and not relied upon is cited for teaching polyoxyalkylene ethers and is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


Cephia D. Toomer
Primary Examiner
Art Unit 1714

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